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Postbus 5818  
2280 HV RIJSWIJK  
NETHERLANDS  
Tel.: +31 70 340 2040  
Fax: +31 70 340 3016

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Uittenbogaard, Frank  
Philips  
Intellectual Property & Standards  
P.O. Box 220  
5600 AE Eindhoven  
PAYS-BAS

EPO Customer Services

Tel.: +31 (0)70 340 45 00

Date  
14-06-2007

Reference PHNL020483EP2	Application No./Patent No. 03727851.2 - 1247
Applicant/Proprietor Koninklijke Philips Electronics N.V.	

#### Decision on further processing under Article 121(3) EPC

Following examination of the request for further processing received on 21.05.07 it has been decided that processing of the above-mentioned European patent application will be resumed.

☒ The finding notified in the communication dated 09.03.07 that the application was deemed to be withdrawn is revoked.

☐ The refusal of the application dated \_\_\_\_\_ is revoked.

The procedure will be continued.

For the Examining Division



Registered letter

EPO Form 2010 06.01 07.06.07



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Sender:

Stephanie, Christine van Wermeskerken  
Philips Intellectual Property & Standards  
Postbus 220  
Eindhoven 5600 AE  
Netherlands

Phone: +31 40 2743771

Fax: +31 40 2743489

✉ D-80298 München  
☎ (+49-89) 2399-0  
Tx 523 656 epmu d  
Fax (+49-89) 23 99-44 65  
✉ P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
☎ (+31-70) 340-2040  
Tx 31 651 epo nl  
Fax (+31-70) 340-30-16  
✉ D-10958 Berlin  
☎ (+49-30) 25901-0  
Fax (+49-30) 25901-840

#### LETTER ACCOMPANYING SUBSEQUENTLY FILED ITEMS

The document(s) listed below is (are) subsequently filed documents pertaining to the following application:

Application number

03727851.2

Applicant's or representative's reference

PHNL020483EP2

	Description of document	Original file name	Assigned file name
1	Request for further processing	PHNL020483EP2 further proc. 21.pdf	RFPR-1.pdf

	Fees	Factor applied	Fee schedule	Amount to be paid
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	Payment	
1	Mode of payment	Not specified

#### Annotations

##### Statement

The undersigned hereby declares that the subsequently filed items do NOT contain or are NOT intended to contain any communication relating either to an appeal or to an opposition (OJ EPO 2003, 609: ".....This possibility is not yet available in opposition and appeal proceedings; in such proceedings, therefore, the electronic filing of documents is not admissible.").

#### Signatures

Place: Eindhoven  
Date: 21.May 2007  
Signed by: NL, Philips IP&S, S. van Wermeskerken 928  
Capacity: (Representative)



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### Acknowledgement of receipt

We hereby acknowledge receipt of the following subsequently filed document(s):

Submission number	233361	
Application number	EP03727851.2	
Date of receipt	21 May 2007	
Receiving office	European Patent Office, The Hague	
Your reference	PHNL020483EP2	
Applicant	Koninklijke Philips Electronics N.V.	
Number of applicants	1	
Documents submitted	package-data.xml ep-sfd-request.xml	epf1038.pdf (1 p.) RFPR-1.pdf\PHNL020483EP2 further proc. 21.pdf (1 p.)
Submitted by	CN=S. van Wermeskerken 928,O=Philips IP&S,C=NL	
Method of submission	Online	
Timestamp of receipt	21 May 2007, 09:37:38 (CEST)	
Digest	24:48:B9:C4:88:40:BF70:96:D1:04:C5:E0:0C:0FBB:F3:C6:29:22	

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## Philips Intellectual Property & Standards

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P.O. Box 220, 5600 AE Eindhoven, The Netherlands

European Patent Office  
Erhardtstrasse 27  
80331 MÜNCHEN  
Germany

Tel: +31 40 27 44579  
Fax: +31 40 27 43489  
E-mail:  
peter.van.gog@philips.com

Ref: PHNL020483EP2  
VGOG/MSP  
Date: 2007-05-21

Re: European Patent Application No 03727851.2 - 1247  
Applicant: Koninklijke Philips Electronics N.V.

Herewith we file a request for further processing of this case pursuant to Art. 121 EPC.

The Professional Representative,

S.C. van Wermeskerken



Philips International B.V.  
Philips Intellectual Property & Standards  
Office address: Prof. Holstlaan 6, Bldg. WAH  
5656 AA Eindhoven, The Netherlands  
Tel +31 40 279 11 11  
Fax +31 40 274 34 89  
Commercial Register Eindhoven no. 17047664  
www.ip.philips.com



Europäisches  
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Sender:

Stephanie, Christine van Wermeskerken  
Philips Intellectual Property & Standards  
Postbus 220  
Eindhoven 5600 AE  
Netherlands

Phone: +31 40 2743771

Fax: +31 40 2743489

✉ D-80298 München  
☎ (+49-89) 2399-0  
Tx 523 656 epmu d  
Fax (+49-89) 23 99-44 65  
✉ P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
☎ (+31-70) 340-2040  
Tx 31 651 epo nl  
Fax (+31-70) 340-30-16  
✉ D-10958 Berlin  
☎ (+49-30) 25901-0  
Fax (+49-30) 25901-840

#### LETTER ACCOMPANYING SUBSEQUENTLY FILED ITEMS

The document(s) listed below is (are) subsequently filed documents pertaining to the following application:

Application number

03727851.2

Applicant's or representative's reference

PHNL020483EP2

	Description of document	Original file name	Assigned file name
1	Reply to examination report	PHNL020483EP2 EPO 21.pdf	EXRE3-1.pdf
2	Amended claims	PHNL020483EP2 CLAIMS 21.05.pdf	CLMSPAMD-1.pdf
3	Drawings	PHNL020483EP2 Figure 5.pdf	DRAW-1.pdf

	Fees	Factor applied	Fee schedule	Amount to be paid
--	------	----------------	--------------	-------------------

	Payment	
1	Mode of payment	Not specified

#### Annotations

##### Statement

The undersigned hereby declares that the subsequently filed items do NOT contain or are NOT intended to contain any communication relating either to an appeal or to an opposition (OJ EPO 2003, 609: ".....This possibility is not yet available in opposition and appeal proceedings; in such proceedings, therefore, the electronic filing of documents is not admissible.").

#### Signatures

Place: Eindhoven  
Date: 21.May 2007  
Signed by: NL, Philips IP&S, S. van Wermeskerken 928  
Capacity: (Representative)

## CLAIMS:

1. Detection means for detecting information in a signal (s) **which comprises a bit synchronization part followed by a word synchronization part or followed by a data ZERO or followed by a data ONE**, comprising integration means (INT) for integrating the signal (s) over time, such that the integration means (INT) is periodically reset at ~~about~~ the start time reference (T<sub>B</sub>) of a periodic time interval (T<sub>i</sub>); and a sample&hold circuit (SH) for periodically sampling and holding the integrated signal (int) ~~at about~~ **up to** an end time reference (T<sub>E</sub>) of the periodic time interval (T<sub>i</sub>) and thereby delivering a further signal (fs), ~~characterized in that~~ the detection means comprising a chain (CHDL) of signal time delay elements, an input of the chain (CHDL) being coupled to receive the further signal (fs); and

10 combining means (CBMNS) having combining inputs coupled to signal taps of the chain (CHDL), the number of the combining inputs and the positions of coupling of the combining inputs to the signal taps of the chain (CHDL) corresponding to the information in the signal (s), **the combining means (CBMNS) delivering a first combining output signal (sync) corresponding to a bit synchronization part followed by a word synchronization part,**

15 **characterized in that the combining means (CBMNS) delivers a second combining output signal (one) corresponding to a bit synchronization part followed by a data ONE, and a third combining output signal (zero) corresponding to a bit synchronization part followed by a data ZERO.**

20 ~~2. Detection means as claimed in claim 1, characterized in that the information comprises a bit synchronization part followed by a word synchronization part or followed by one of a plurality of possible types of data bit parts, and in that the combining means (CBMNS) delivers a combining output signal corresponding to the bit synchronization part followed by a word synchronization part and delivers combining output signals for each bit synchronization part followed by a possible type of data bit part.~~

25

~~32.~~ Detection means as claimed in claim ~~21~~, characterized in that the detection means comprises processing means (PRMNS) for processing ~~all~~ **the first, second, and third** combining output signals, ~~the processing is accomplished such that,~~ during a predetermined



number of the time intervals ( $T_i$ ), in each time interval ( $T_i$ ) the lowest (highest) signal value of the signal values of ~~all~~ the **first, second, and third** combining output signals is detected together with an accompanying position number corresponding to the corresponding time interval ( $T_i$ ), and that the position number corresponding to the lowest (highest) detected  
5 signal value within the predetermined number of time intervals ( $T_i$ ) is deemed to be the correct position ( $P_0$ ) of the bit synchronization part followed by a word synchronization part.

**2 ALTERNATIVE.** Detection means as claimed in claim ~~21~~, characterized in that the detection means comprises processing means (PRMNS) for processing ~~all~~ the **first, second, and third** combining output signals, ~~the processing is accomplished such that,~~ during a predetermined number of the time intervals ( $T_i$ ), wherein in each time interval ( $T_i$ ) the lowest ~~(highest)~~ or the highest signal value of the signal values of ~~all~~ the **first, second, and third** combining output signals is detected together with an accompanying position number corresponding to the corresponding time interval ( $T_i$ ), and that, **in case the lowest signal**  
15 **value of the signal values of ~~all~~ the first, second, and third combining output signals is detected together with the accompanying position number,** the position number corresponding to the lowest ~~(highest)~~ detected signal value within the predetermined number of time intervals ( $T_i$ ) is deemed to be the correct position ( $P_0$ ) of the bit synchronization part followed by a word synchronization part, **and that in case the highest signal value of the**  
20 **signal values of ~~all~~ the first, second, and third combining output signals is detected together with the accompanying position number, the position number corresponding to the highest detected signal value within the predetermined number of time intervals ( $T_i$ ) is deemed to be the correct position ( $P_0$ ) of the bit synchronization part followed by a word synchronization part.**

25

**43.** Detection means as claimed in claim ~~32~~, characterized in that the detection means comprises further processing means (FPRMNS) for further processing the deemed correct positions ( $P_0$ ) delivered by the processing means (PRMNS) of the bit synchronization part followed by a word synchronization part, the further processing means (FPRMNS)  
30 examining the positions of the deemed correct positions ( $P_0$ ) of the bit synchronization part followed by a word synchronization part during a ~~substantially~~ longer period of time as compared with the predetermined number of time intervals ( $T_i$ ), the further processing means (FPRMNS) comprising an up/down counter (CNT) having a registered value (RCN) which is incremented (decremented) by a unit value up to a predetermined reference value (PRV) of

- the up/down counter (CNT), whenever a deemed correct position ( $P_0$ ) of the bit synchronization part followed by a word synchronization part occurs at the position expected by the further processing means (FPRMNS), and which registered value (RCN) is decremented (incremented) by a unit value whenever a deemed correct position ( $P_0$ ) of the bit synchronization part followed by a word synchronization part does not occur at the position expected by the further processing means (FPRMNS), the further processing means (FPRMNS) delivering positions ( $P_1$ ) of the bit synchronization part followed by a word synchronization part with improved position reliability accomplished by the manner of operation of the further processing means (FPRMNS) in which the position ( $P_1$ ) of the bit synchronization part followed by a word synchronization part which is delivered by the further processing means (FPRMNS) is equal to the position expected by the further processing means (FPRMNS) as long as the registered value (RCN) is above (below) a further predetermined reference value (FPRV), and in which the position ( $P_1$ ) of the bit synchronization part followed by a word synchronization part which is delivered by the further processing means (FPRMNS) is equal to the position ( $P_0$ ) delivered by the processing means (PRMNS) when the registered value (RCN) becomes equal to the further predetermined reference value (FPRV), in which latter case the up/down counter (CNT) is reset.
- 20 ~~54.~~ An apparatus for at least reading data from a disk (1) with address data (2) available on said disk (1), comprising means for deriving a signal (s) during reading of the disk (1), which signal (s) is a representation of the address data (2), and comprising detection means as defined in one of the preceding claims.
- 25 ~~65.~~ An optical disk drive for at least reading data from an optical disk (1) with address data (2) available in a pre-groove (4) of said optical disk (1), comprising means for deriving a signal (s) during reading of the optical disk (1), which signal (s) is a representation of the address data (2), and comprising detection means as defined in claim 1, 2, or 3, ~~or 4.~~
- 30 ~~76.~~ A magneto-optical disk drive for at least reading data from a magneto-optical disk (1) with address data (2) available in a pre-groove (4) of said magneto-optical disk (1), comprising means for deriving a signal (s) during reading of the magneto-optical disk (1), which signal (s) is a representation of the address data (2), and comprising detection means as defined in claim 1, 2, or 3, ~~or 4.~~



~~8. A method of detecting address data (2) in a signal (s), comprising the steps of~~

~~periodically integrating the signal (s) over time during a time interval ( $T_i$ ),~~

5 ~~sampling and holding the integrated signal (int) at about the end ( $T_B$ ) of each time interval ( $T_i$ ) and thereby delivering a further signal (fs),~~

~~delaying the further signal (fs) and thereby providing a plurality of delayed signals having various delays,~~

10 ~~combining at least part of the delayed signals in a manner which corresponds to the address data (2) in the signal (s).~~

97. A method of detecting address data (2) in a signal (s), which address data (2) comprises a bit synchronization part followed by a word synchronization part or followed by a data ZERO or followed by a data ONE ~~one of a plurality of possible types of data bit~~  
15 ~~parts~~, the method comprising the steps of:

- periodically integrating the signal (s) over time during a time interval ( $T_i$ ),

- sampling and holding the integrated signal (int) ~~at about~~ **up to** the end ( $T_B$ ) of each time interval ( $T_i$ ) and thereby delivering a further signal (fs),

20 - delaying the further signal (fs) and thereby providing a plurality of delayed signals having various delays,

- combining at least part of the delayed signals in a manner which corresponds to the address data (2) in the signal (s), and thereby delivering a **first** combining output signal (sync) corresponding to ~~the a~~ bit synchronization part followed by a word synchronization part, and thereby delivering a **second** combining output signal (one) ~~s for each bit synchronization~~  
25 ~~part followed by a possible type of data bit part~~ corresponding to a bit synchronization part followed by a data ONE, and thereby delivering a **third** combining output signal (zero) corresponding to a bit synchronization part followed by a data ZERO.

30 ~~108.~~ A method as claimed in claim 97, characterized in that the method further comprises the step of processing ~~all~~ the **first** combining output signal (sync), the **second** combining output signal (one), and the **third** combining output signal (zero) ~~combining output signals~~ such that, during a predetermined number of the time intervals ( $T_i$ ), in each time interval ( $T_i$ ) the lowest (highest) signal value of the signal values of ~~all~~ the **first, second, and third** combining output signals is detected together with an accompanying position

number corresponding to the associated time interval ( $T_i$ ), and that the position number corresponding to the lowest (highest) detected signal value within the predetermined number of time intervals ( $T_i$ ) is deemed to be the correct position ( $P_0$ ) of the bit synchronization part followed by a word synchronization part.

5

~~11. Detection means for detecting information in a signal ( $f_s$ ), comprising a chain (CHDL) of signal time delay elements, an input of the chain (CHDL) being coupled to receive the signal ( $f_s$ ), and combining means (CBMNS) having combining inputs coupled to signal taps of the chain (CHDL), the number of the combining inputs and the positions of coupling of the combining inputs to the signal taps of the chain (CHDL) corresponding to the information in the signal ( $f_s$ ).~~

10

5/8

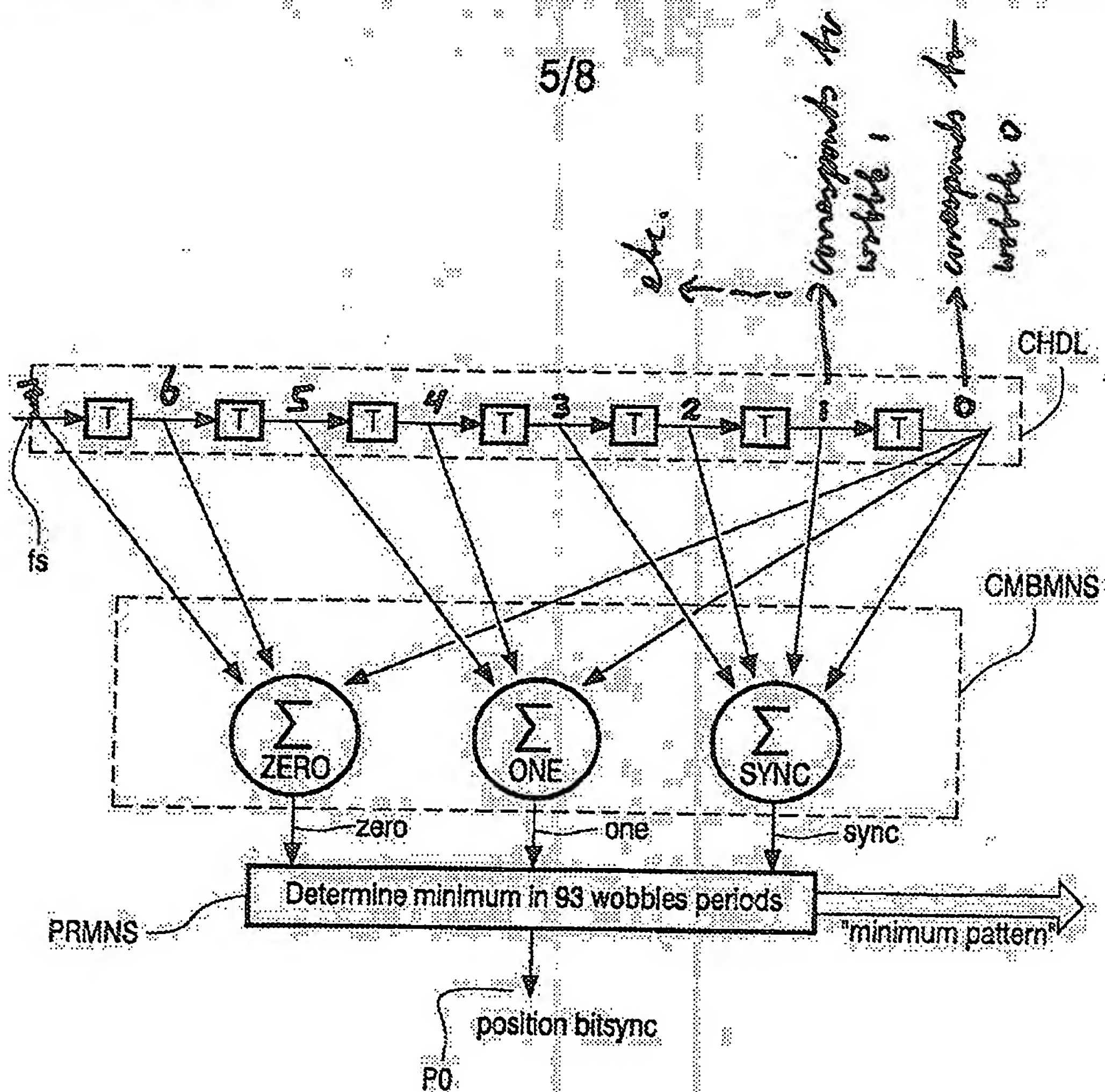


FIG.5

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P.O. Box 220, 5600 AE Eindhoven, The Netherlands

European Patent Office  
Erhardtstrasse 27  
80331 MÜNCHEN  
Germany

Tel: +31 40 27 44579  
Fax: +31 40 27 43489  
E-mail:  
peter.van.gog@philips.com

Ref: PHNL020483EP2  
VGOG/MSP  
Date: 2007-05-21

Re: European Patent Application No. 03727851.2 – 1247  
Applicant: Koninklijke Philips Electronics N.V.

I hereby respond to your communication dated July, 21, 2006.

A set of amended claims is attached to replace the original set of claims.  
Unless stated to the contrary any reference to a claim in this communications is to be understood as a reference to the claim as amended.

Amendments are indicated as follows:

- additions are put in "bold"
- deletions are put in "italic bold" and with "double strikethroughs"

In view of the amount of objections and the complexity of the subject matter it is requested to defer any amendments of the text and the drawings to a later stage in the procedure when allowability of a set of claims is agreed.

If the examiner still has objections to the claims it is respectfully requested to apply for a further communication in writing, possibly supplemented with an informal interview by telephone. However if the examiner intends to reject the application without issuing any further communication, oral proceedings are hereby requested.

It is believed that some of the clarity objections might disappear by a further explanation of the invention in this reply.

Especially with the clarity objections raised under point 2.3 of the communication not all objections seems reasonable. It is believed that the objections against "lowest (highest)", "incremented (decremented)", and the like are unnecessary.



Philips International B.V.  
Philips Intellectual Property & Standards  
Office address: Prof. Holstlaan 6, Bldg. WAH  
5656 AA Eindhoven, The Netherlands  
Tel +31 40 279 11 11  
Fax +31 40 274 34 89  
Commercial Register Eindhoven no. 17047664  
www.ip.philips.com

It is expected to be clear that all these features in a claim should be read without the features placed in parentheses or that all these features in said claim should be read with the features placed in parentheses only. It is believed to be an effective way to keep the claims concise. Possibly a comment to this can be added in the text.

However as an example is presented an ALTERNATIVE to claim 2 in which the stated objection is overcome. However it is believed that such a claim is unnecessary cumbersome. It is to be noted that if this solution would for instance be applied to claim 3 it would be even much more cumbersome. It would not be very helpful in respect of the readability/understandability of the claims. Therefore it is requested to review this kind of objections.

With regard to the other objections some are overcome by amendments and some are left unchanged since it is believed to be clear in view of the application as a whole. With respect of said objections it is to be reminded that some words/phrases are mentioned in the Guidelines as example of clarity objections, but that there is also stated that it does not always need to be considered as unclear statements; it should be dealt with case by case.

Previously claim 11 is deleted. (It was by the way also not present in the priority document.)

The clarity objections not yet dealt with concern the objections mentioned under point 2.1 of the communication: "the combining inputs and taps".

First of all claim 1 is amended to express that in correspondence to Figure 5 the combining means (CBMNS) delivers a first combining output signal (sync), a second combining output signal (one), and a third combining output signal (zero). Although in most situations complete words are not allowed as references put in between parentheses, it is believed that in this particular situation it should be allowed since it gives no confusion with respect to the scope of protection of the claim, and it is also in correspondence with the indications in Figure 5. (Alternatively the reference signs in the drawings could be amended.)

Further claim 1 is amended to better reflect what is considered to be known to the skilled person (put in the pre-amble) and what is considered novel and inventive (put in the characterization part).

With respect to the unclarity, the examiner correctly states that Figure 5 can help for clarification but seems to have overlooked that this should be done in conjunction with other Figures, especially Figure 4.

As is clear from claim 1 the number of taps and the positions of coupling correspond to the information in the signal. So there is not a random combination. Figure 5 is a working example just for one of the available standardized formats, in this example corresponding to DVD+RW. So basically the claim could be amended to exactly correspond to Figure 5 to overcome the clarity objection. However the principle of the invention works for all known (and future) formats, thus such a narrow claim would not give a fair scope of protection of the present invention. Of course the claim should always be clear. It is believed that, although not specifically described in the application, the claim is clear enough in order for the skilled person to be able to carry out the invention in the broad sense of the claim. This is because the skilled person can derive from the combination of Figures 4 and 5 not only



this example but is also able to implement the invention for other formats as will be further elucidated below.

Important to note is that the "pattern matching principle" (as indicated in the text) is generally known to the skilled person. It means that for the skilled person everything shown in Figure 5 is prior art except for the second and third combining output signal (and its combining means with corresponding couplings).

It will now be demonstrated how the skilled person applies the claimed invention with the aid of the Figures.

First of all the definitions of the terms "data ZERO" and "data ONE" can be found at lines 14-16 on page 3. It is there also stated that a data bit ~~part~~ represents a logic "0" or a logic "1". Thus it is, generally, ~~not~~ meant that "data ZERO" and "data ONE" is just a logic "0" or a logic "1". In Figure 4 "databit"0" pattern" and "databit"1" pattern" relates to "data ZERO" and "data ONE", respectively.

In Figure 4 the 3 signals start with a wobble which is just one period of a sine wave. This is just wobble nr. 92 of the previous 93 wobbles (corresponding to 2 Sync Frames). (Wobble nr. 8 to 92 is the monotone wobble region.)

Consider wobble nr. 0. This is always a bit sync and is presented as an inverted wobble (phase of the sine wave is 180 degrees shifted).

Lets now first consider the word sync pattern. Wobble nr. 0 is an inverted wobble and represents the bit sync within the word sync pattern. Wobble nr. 1 is also an inverted wobble. (As a consequence the sine waves of wobbles nr. 0 and nr. 1 do not have a (positive) step in its derivative at the end of wobble nr. 0 / beginning of wobble nr. 1 !). Also wobbles nr. 2 and 3 are inverted wobbles.

Thus what is shown in Figure 4 is that the word sync pattern is implemented as one inverted wobble (the bit sync) followed by 3 inverted wobbles (the word sync), followed by 4 non-inverted wobbles (nr. 4-7), followed by 85 non-inverted wobbles.

In the same way it is clear that the "databit"0" pattern" is implemented as one inverted wobble (the bit sync) followed by 3 non-inverted wobbles, followed by 2 non-inverted wobbles (nrs. 4-5), followed by 2 inverted wobbles (nrs. 6-7), followed by 85 non-inverted wobbles.

In the same way it is clear that the "databit"1" pattern" is implemented as one inverted wobble (the bit sync) followed by 3 non-inverted wobbles, followed by 2 inverted wobbles (nrs. 4-5), followed by 2 non-inverted wobbles (nrs. 6-7), followed by 85 non-inverted wobbles.

It is shown that for wobbles nrs. 0 - 3 "databit"0" pattern" and "databit"1" pattern" are equal. So basically "databit"0" pattern" and "databit"1" pattern" only differs in wobbles nrs 4-7; data = "0" is represented by 2 non-inverted wobbles followed by 2 inverted wobbles while data = "1" is represented by 2 inverted wobbles followed by 2 non-inverted wobbles. As a consequence the phases of the sine waves of the "databit"0" pattern" and "databit"1" pattern" differs 180 degrees for wobbles nrs. 4-7. Therefore this kind of modulation is called bi-phase modulation.

For the "word sync. pattern" wobbles nrs. 4-7 are all non-inverted wobbles because this pattern does not comprise data information. (Indicated with "empty" in Figure 4.)



Only for explanatory reasons a Figure 5 is added in which the digits 0, 1, ..., 7 are added. The word sync patterns and databit "0" and "1" pattern are constantly shifted through the delay elements from the left side to the right side. According to the invention a minimum (in this example) is detected if a wobble having nr. 0 has reach the output of the last delay element, a wobble having nr. 1 has reach the output of the penultimate delay element, etc. Therefore the digits 0-7 are indicated in Figure 5. It is clear that the number of delay elements, and the number and positions of the couplings between the combining means (CMBMNS) and the delay elements are not randomly chosen:

The "SYNC" has couplings with the points indicated with digits 0, 1, 2, and 3 (and not with others) because this follows from the DVD+RW format from Figure 4: the ADIPbitSync and ADIPWordSync part of the word sync pattern is sufficient to distinguish it from a databit "0" pattern or a databit "1" pattern. (Wobbles 0, 1, 2, and 3.)

The "ONE" has couplings with the points indicated with digits 0, 4, and 5 because this follows from the DVD+RW format from Figure 4; the ADIPbitSync (wobble nr. 0), the first inverted wobble in the "Data = "1" " (wobble nr. 4), and the second inverted wobble in the "Data = "1" " (wobble nr. 5).

The "ZERO" has couplings with the points indicated with digits 0, 6, and 7 because this follows from the DVD+RW format from Figure 4; the ADIPbitSync (wobble nr. 0), the first inverted wobble in the "Data = "0" " (wobble nr. 6), and the second inverted wobble in the "Data = "0" " (wobble nr. 7).

Wobbles nrs. 8-92 in the monotone wobble region are equal for all patterns.

Briefly summarized the number and positions of the couplings correspond to the number and positions of the inverted wobbles in Figure 4. Therefore the skilled person has no difficulty in carry out the invention claimed in the broad terms of claim 1. If the skilled person is presented with a different format (thus different number and/or positions of the inverted wobbles in Figure 4) he/she will easily adapt the circuit of Figure 5 accordingly without any inventive skills.

Although the skilled person finds no difficulty in carrying out the "pattern matching principle" because this is a well known principal, this should not lead to the unjustified conclusion that claim 1 would lack novelty or inventive step.

A major difference is that conventionally only the "SYNC" is used for detection while the inventors have come up with the idea that detection reliability is increased significantly by also involving the "ZERO" and "ONE". This is neither disclosed in D2 nor in D1, and thus claim 1 is both novel and inventive.

With regard to the objection raised under point 2.3 d) reference is made to the table of Figure 6 and the corresponding description on page 7, line 33 - page 8, line 9. The position number corresponds to a time interval (Ti) where the lowest value has been detected, and where thus the bitsync is deemed to be present.

With respect to the objection raised under point 2.3 e) "*deemed*" the following is remarked. The word "deemed" was introduced not because of the fact that reliability of the sync bit can never guaranteed to be 100% but because in dependent claim 3 further processing means ("electronic flywheel") is introduced to increase the reliability of the detection which could thus sometimes lead to a different position number. Therefore there was a need to give a different name to the position number acquired if yet no "electronic flywheel" was used *persé* and if it is used. Therefore the wording "*is deemed* to be the correct position" was introduced. To put it in other words, if only claims 1 and 2 would have been drafted said wording would just be: "*is the correct position*"

With respect to the objection raised under point 2.3 b) the following is remarked. Signal value does not mean "0" or "1". It is to be understood that the signals on the outputs of the signal time delay elements are (in this example) analog signals which can basically have any value. Therefore all kinds of values are present in Figure 6, both positive and negative values. For the sake of simplicity only integer values are indicated, but from this it may not be concluded that the values can only be a digital value. Basically (but this is not commonly applied) the signal values on the outputs of the signal time delay elements could also be digitized. But digitalization does not automatically means only two values represented by a logic "0" or a logic "1". The digital values can then also for instance be chosen to be equal to 101 which could be for instance represented by a logic "-50", a logic "-49" .....a logic "0" .....logic "+49", logic "50". It is also possible that in the latter case (101 values) there is chosen for a binary code (only logic "0" and "logic "1" values) but that the values are represented by a series of bits (bytes) which represents the numbers -50 ...0 ...+50.

It is to be noted that the invention is mainly described for analog signals but that digital signals can be used in stead. Although the electronic implementation would then be different, the same inventive principle can be applied. This is in correspondence with the remark on page 1 lines 15-19 and Figure 1 (ADC in dashed lines).

The Professional Representative,

S.C. van Wermeskerken

Encl.



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### Acknowledgement of receipt

We hereby acknowledge receipt of the following subsequently filed document(s):

Submission number	233367	
Application number	EP03727851.2	
Date of receipt	21 May 2007	
Receiving office	European Patent Office, The Hague	
Your reference	PHNL020483EP2	
Applicant	Koninklijke Philips Electronics N.V.	
Number of applicants	1	
Documents submitted	package-data.xml ep-sfd-request.xml CLMSPAMD-1.pdf\PHNL020483 EP2 CLAIMS 21.05.pdf (5 p.)	epf1038.pdf (1 p.) EXRE3-1.pdf\PHNL020483EP2 EPO 21.pdf (5 p.) DRAW-1.pdf\PHNL020483EP2 Figure 5.pdf (1 p.)
Submitted by	CN=S. van Wermeskerken 928,O=Philips IP&S,C=NL	
Method of submission	Online	
Timestamp of receipt	21 May 2007, 09:49:12 (CEST)	
Digest	45:A2:50:ED:76:38:6B:1F:97:79:99:A1:77:B1:69:06:AF:E8:CA:E5	

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European Patent Office  
Postbus 5818  
2280 HV RIJSWIJK  
NETHERLANDS  
Tel.: +31 70 340 2040  
Fax: +31 70 340 3016

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Patentamt

European  
Patent Office

Office européen  
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Uittenbogaard, Frank  
Philips  
Intellectual Property & Standards  
P.O. Box 220  
5600 AE Eindhoven  
PAYS-BAS



EPO Customer Services

Tel.: +31 (0)70 340 45 00

Date

09-03-2007

Reference PHNL020483EP2	Application No./Patent No. 03727851.2 - 1247
Applicant/Proprietor Koninklijke Philips Electronics N.V.	

#### Noting of loss of rights (R. 69(1) EPC)

The European Patent application is deemed to be withdrawn under Article 96(3) EPC, because the invitation to file observations on the communication from the Examining Division dated 21.07.06 was not complied with.

#### Request for decision

If the applicant considers that this finding is inaccurate, he may, within (a non-extendable period of) **two months** after notification of this communication, apply in writing for a decision on the matter by the European Patent Office (R. 69(2) EPC). The application can only lead to the finding being reversed, if this does not actually correspond to the factual or legal situation.

#### Further processing of the application

The legal consequence that the application is deemed withdrawn will be retracted if within (a non-extendable period of) **two months** after notification of this communication further processing of the European patent application under Article 121 EPC is requested in writing, the fee for further processing is paid in accordance with the Rules Relating to Fees, and the omitted act is completed.

For the Examining Division



Registered letter

EPO Form 2021A 01.95 02.03.07

ADWI 11



P.B.5818 - Patentlaan 2  
2280 HV Rijswijk (ZH)  
☎ (070) 3 40 20 40  
FAX (070) 3 40 30 16

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Generaldirektion 1

Directorate General 1

Direction générale 1

Uittenbogaard, Frank  
Philips  
Intellectual Property & Standards  
P.O. Box 220  
5600 AE Eindhoven  
PAYS-BAS



**EPO Customer Services**

Tel.: +31 (0)70 340 45 00

Date  
13.11.06

Reference PHNL020483EP2	Application No./Patent No. 03727851.2 - 1247
Applicant/Proprietor Koninklijke Philips Electronics N.V.	

#### **Extension of time limit pursuant to Rule 84 EPC**

Examination procedure

With reference to your request, the time limit for replying to the communication dated 21.07.06 has been extended

by 2 months

to a total of 6 months

from the date of notification of the above-mentioned communication.

Please note: To the extent that your request exceeded the above extension, your request has been refused.

#### **Note:**

The granting of extensions to time limits is governed by the implementing Regulations to the EPC and the Guidelines for Examination in the EPO, part E-VIII, 1.6.

**If no reply to the communication is received in due time, the European patent application will be deemed to be withdrawn (Article 96(3) EPC).**

Examining Division



Dubret, Françoise



**Europäisches  
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**European  
Patent office**

**Office européen  
des brevets**

Sender:  
Theodorus Nicolaas Mak  
Philips Intellectual Property & Standards  
Postbus 220  
Eindhoven 5600 AE  
Netherlands

Phone: +31 40 2743356

Fax: +31 40 2743489

✉ D-80298 München  
☎ (+49-89) 2399-0  
Tx 523 656 epmu d  
Fax (+49-89) 23 99-44 65  
✉ P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
☎ (+31-70) 340-2040  
Tx 31 651 epo nl  
Fax (+31-70) 340-30-16  
✉ D-10958 Berlin  
☎ (+49-30) 25901-0  
Fax (+49-30) 25901-840

#### LETTER ACCOMPANYING SUBSEQUENTLY FILED ITEMS

The document(s) listed below is (are) subsequently filed documents pertaining to the following application:

Application number

03727851.2

Applicant's or representative's reference

PHNL020483 EP2

	Description of document	Original file name	Assigned file name
1	Request for extension of time limit during examination procedure	NL020483 EP2 brf EPO ext. (08.11).pdf	EXRE92-1.pdf

	Factor applied	Fee schedule	Amount to be paid
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	Payment
--	---------

#### Annotations

#### Statement

The undersigned hereby declares that the subsequently filed items do NOT contain or are NOT intended to contain any communication relating either to an appeal or to an opposition (OJ EPO 2003, 609: ".....This possibility is not yet available in opposition and appeal proceedings; in such proceedings, therefore, the electronic filing of documents is not admissible.").

#### Signatures

Place: Eindhoven  
Date: 08.November 2006  
Signed by: NL, Philips IP&S, T. Mak 910  
Capacity: (Representative)



## Philips Intellectual Property & Standards

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P.O. Box 220, 5600 AE Eindhoven, The Netherlands

European Patent Office  
Erhardtstrasse 27  
80331 MÜNCHEN  
Germany

Tel: +31 40 27 44579

Fax: +31 40 27 43489

Ref: PHNL020483 EP2

VGOG/AB

Date: 2006-11-08

**Re: European Patent Application No. 03 727 851.2 - 1247**  
**Applicant: Koninklijke Philips Electronics N.V.**  
**Communication dated: 21.07.2006**

We herewith request an extension of the time limit for responding to the above-mentioned communication by 2 months, according to Rule 84 EPC.

The Professional Representative,

T.N. Mak



Philips International B.V.  
Philips Intellectual Property & Standards  
Office address: Prof. Holstlaan 6, Bldg. WAH  
5656 AA Eindhoven, The Netherlands  
Tel +31 40 279 11 11  
Fax +31 40 274 34 89  
Commercial Register Eindhoven no. 17047664  
[www.ip.philips.com](http://www.ip.philips.com)



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### Acknowledgement of receipt

We hereby acknowledge receipt of the following subsequently filed document(s):

Submission number	172088	
Application number	EP03727851.2	
Date of receipt	08 November 2006	
Receiving office	European Patent Office, The Hague	
Your reference	PHNL020483 EP2	
Applicant	Koninklijke Philips Electronics N.V.	
Number of applicants	1	
Documents submitted	package-data.xml ep-sfd-request.xml	EPF1038.PDF (1 p.) EXRE92-1.pdf\NL020483 EP2 brf EPO ext. (08.11).pdf (1 p.)
Submitted by	CN=T. Mak 910,O=Philips IP&S,C=NL	
Method of submission	Online	
Timestamp of receipt	08 November 2006, 16:09:01 (CET)	
Digest	32:97:62:09:82:D8:C1:B9:CA:CF:2A:63:A0:91:CE:92:1A:A5:B5:0E	

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✉ EPA/EPO/OEB  
D-80298 München  
☎ +49 89 2399-0  
TX 523 656 epmu d  
FAX +49 89 2399-4465

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Generaldirektion 2

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Direction Générale 2

Uittenbogaard, Frank  
Philips  
Intellectual Property & Standards  
P.O. Box 220  
5600 AE Eindhoven  
PAYS-BAS

**Telephone numbers: Branch at The Hague**

**Primary Examiner** +31 70 340-3453  
(substantive examination)

**Formalities Officer / Assistant** +31 70 340-0  
(Formalities and other matters)



Application No. 03 727 851.2 - 1247	Ref. PHNL020483EP2	Date 21.07.2006
Applicant Koninklijke Philips Electronics N.V.		

### Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

**of 4 months**

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

**Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).**



Brunet, L  
Primary Examiner  
for the Examining Division

Enclosure(s): 5 page/s reasons (Form 2906)

**Bescheld/Protokoll (Anlage)**

Datum  
Date 21.07.2006  
Date

**Communication/Minutes (Annex)**

Blatt  
Sheet 1  
Feuille

**Notification/Procès-verbal (Annexe)**

Anmelde-Nr.:  
Application No.: 03 727 851.2  
Demande n°:

The examination is being carried out on the **following application documents**:

**Description, Pages**

1-9 as published

**Claims, Numbers**

1-11 as published

**Drawings, Sheets**

1/8-8/8 as published

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Reference is made to the following documents; the numbering will be adhered to in the rest of the procedure:

D1 : US-B1-6 275 466 (2001-08-14)

D2 : XP002197293

VLERKEN VAN J J L M ET AL: "Format detection for DVD+ReWritable 4.7 GB", ICCE (2000-06-13), pp 162-163

1. The application does not meet the requirements of **Article 83 EPC**, in conjunction with **Rule 27(1)(e)**, because the subject-matter of **claim 11** is not sufficiently disclosed to allow a person skilled in the art to carry it out. In the description there is no detailed embodiment of bitsync detection without an integrator contrary to what is claimed in claim 11. In order to overcome this objection, the applicant is requested to comment on the following questions:

- a) if no integrator is used, how do the timings work ?
- b) why would the timings given for the detailed embodiment with the integrator work without the integrator ?

2. The application does not meet the requirements of Article 84 EPC, because **claims 1, 3, 4, 8, 10 and 11** are not clear for the following reasons:



**2.1** In **claims 1 and 11** the layout of combining inputs and taps is totally obscure. Are there many inputs per tap ? And many taps per input ? If it is randomly combined, how can the bitsync be detected ? (see page 2, lines 23-24). Figure 5 can help for clarification. In addition, the expression "at about" is not clear since it is a relative term.

**2.2** The remarks above (see point 2.1) also apply to **claim 8** where the sentence "in a manner which corresponds" is not clear.

**2.3 Claims 3, 4 and 10** attempt to define detection means using many vague definitions and expressions which put anyone at burden trying to understand the scope of the claims. See for example :

a) "such that"

b) "signal value". Does it mean "0" or "1" ? However no better definition could be found in the description (only figure 6 illustrates some values like "-32", "-3" or "+38", but it is not clear where they come from).

c) "lowest (highest)" or "incremented (decremented)", two opposite words which bring ambiguity.

d) "position number corresponding ...". Is it the position within a time interval (Ti) or is it the time interval (Ti) where the lowest value has been detected ?

e) "is deemed " (also not clear in description page 7, line 33).

f) "substantially" which is a relative term.

g) the word "associated" in claim 10 is not clearer than "corresponding" in claim 3.

Therefore the full examination of claims 3, 4 and 10 at this stage is not possible.

The claims should be redrafted with a reasonable amount of technical definitions.

**2.4** In **claims 2 and 9** the words "corresponding to" and the expression "a possible type" are not clear.

**3.** Furthermore, as far as claim 11 could be understood, the subject-matter of claim 11 is not new in the sense of **Article 54(1) and (2) EPC**, and therefore the requirements of **Article 52(1) EPC** are not met.

Document **D1** (see column 20, line 65 to column 21, line 43, and figure 19) discloses (the



references in parentheses applying to this document):

detection means (18, 44, 45, 47) for detecting information in a signal, comprising a chain of signal time delay elements (shift registers (37) to (40)) an input of the chain being coupled to receive the signal (PLL data detect circuit output); and combining means (pattern matching circuits (41), (42)) having combining inputs coupled to signal taps of the chain ((37) to (40)), the number of the combining inputs and the positions of coupling of the combining inputs to the signal taps of the chain corresponding to the information in the signal (see column 21, lines 31-35).

Hence all the features of claim 11 are disclosed in **D1** and the subject-matter of **claim 11** is not novel.

**4.1 Claim 1** includes all the features of claim 11 and is therefore dependent on claim 11, (**Rule 29(4) EPC** and the Guidelines **C-III, 3.4**).

**4.2** The document **D2** is regarded as being the closest prior art to the subject-matter of **claim 1**, and insofar as this claim can be understood, this document shows the following features (the references in parentheses applying to this document):

detection means (see page 162, last line to page 163, left-hand column, line 3 " ... the individual wobble periods are detected using synchronous detection in combination with Integrate-and-Dump (I&D) technique..." ) for detecting information in a signal, comprising integration means (I&D circuitry) for integrating the signal over time which is periodically reset **at about the start time reference of a periodic time interval** and a sample & hold circuit (I&D circuitry) for periodically sampling and holding the integrated signal **at about an end time reference of the periodic time interval** delivering a further signal , and combining means,

from which the subject-matter of **claim 1** differs in that

the detection means comprises a chain of signal time delay elements, an input of the chain being coupled to receive the further signal

and the combining means having combining inputs coupled to signal taps of the chain , the number of the combining inputs and the positions of coupling of the combining inputs to the signal taps of the chain corresponding to the information in the signal.





The problem to be solved by the present invention may therefore be regarded as how to implement a reliable detection of the information in the signal.

**D2** only discloses the presence of combination means without giving details (page 163, left-hand column, second paragraph "By combining the individual outputs of the I&D circuitry according to the modulating rules from Figure 2, both an ADIP bit and a word sync mechanism (flywheel) are constructed.").

However, **D1** discloses detection means comprising combining means and a chain of signal time delay elements (see point 3. above).

In seeing **D1** the skilled person would therefore include these features in the detection means described in **D2** in order to solve the problem posed without exercising an inventive step, and at such arrive at the detection means of claim 1.

Therefore **claim 1** is not allowable (**Articles 52 (1) and 56 EPC**).

5. The objections to apparatus claim 1 (see point 4.2) apply mutatis mutandis to corresponding features of method **claim 8**. As such **claim 8** is not inventive either (**Articles 52(1) and 56 EPC**).

6. The additional subject-matter of dependent **claim 2** is also disclosed in **D2** (see figures 1 and 2; and page 163, left-hand column, second paragraph "By combining the individual outputs of the I&D circuitry according to the modulating rules from Figure 2, both an ADIP bit and a word sync mechanism (flywheel) are constructed.").

Therefore claim 2 is not inventive either (**Articles 52(1) and 56 EPC**).

7. The present application does not meet the requirements of **Article 52(1) EPC**, because the subject-matter of **claims 5, 6 and 7** does not involve an inventive step in the sense of **Article 56 EPC**.

The use of a non-inventive detection means (see points 4.2) in an apparatus, an optical disk drive or a magneto-optical disk drive is not inventive because the skilled person would try to use such a detection means in an apparatus or a disk drive in order to read data from



a disk.

**8.1 Claim 9** includes all the features of claim 8. Hence, claim 9 should be reformulated as a claim dependent on claim 8, cf. **Rule 29(4) EPC** and the Guidelines **C-III, 3.4**.

**8.2.** The objections to apparatus claims 1 and 2 (see points 4.2 and 6) apply mutatis mutandis to corresponding features of method **claim 9**.

As such claim 9 is not inventive either (**Articles 52(1) and 56 EPC**).

**9.** At least some of the objections raised above (see point **2.3**) are such that there appears to be no possibility of overcoming them by amendment.

**10.** It is not at present apparent which part of the application could serve as a basis for a new, allowable claim. Should the applicant nevertheless regard some particular matter as patentable, an independent claim should be filed taking account of Rule 29(1) EPC. The applicant should also indicate the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof.

The attention of the applicant is drawn to the fact that the application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed (Article 123(2) EPC).



P.B.5818 - Patentlaan 2  
2280 HV Rijswijk (ZH)  
T (070) 3 40 20 40  
FAX (070) 3 40 30 16

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Generaldirektion 1

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Direction générale 1

Uittenbogaard, Frank  
Philips  
Intellectual Property & Standards  
P.O. Box 220  
5600 AE Eindhoven  
PAYS-BAS



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Tel.: +31 (0)70 340 45 00

Date

25.01.06

Reference PHNL020483EP	Application No./Patent No. 03727851.2 - 2223 PCT/IB0302334
Applicant/Proprietor Koninklijke Philips Electronics N.V.	

**Notification of European publication number and information on the application of Article 67(3) EPC**

The provisional protection under Article 67(1) and (2) EPC in the individual contracting states becomes effective only when the conditions referred to in Article 67(3) EPC have been fulfilled (for further details, see information brochure of the European Patent Office "National Law relating to the EPC" and additional information in the Official Journal of the European Patent Office).

Pursuant to Article 158(1) EPC the publication under Article 21 PCT of an international application for which the European Patent Office is a designated Office takes the place of the publication of a European patent application.

The bibliographic data of the above-mentioned Euro-PCT application will be published on 08.03.06 in Section I.1 of the European Patent Bulletin. The European publication number is 1631961.

In all future communications to the European Patent Office, please quote the application number plus Directorate number.

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2280 HV Rijswijk (ZH)  
☎ (070) 3 40 20 40  
FAX (070) 3 40 30 16

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Generaldirektion 1

Directorate General 1

Direction générale 1

Uittenbogaard, Frank  
Philips  
Intellectual Property & Standards  
P.O. Box 220  
5600 AE Eindhoven  
PAYS-BAS



**EPO Customer Services**

Tel.: +31 (0)70 340 45 00

Date 18-01-2006

Reference PHNL020483EP	Application No./Patent No. 03727851.2 - 2223 PCT/IB0302334
Applicant/Proprietor Koninklijke Philips Electronics N.V.	

## Communication pursuant to Rules 109 and 110 EPC

### (1) Amendment of application documents, especially the claims (R. 109 EPC)

The above mentioned international (Euro-PCT) application has entered the European phase, or can do so, once the necessary conditions are fulfilled.

Under Articles 28, 41 PCT, Rules 52, 78 PCT and Rule 86(2) to (4) EPC, the applicant may amend the application documents after receiving the international search report.

**Whether or not he has already done so, he now has a further opportunity to file amended claims or other application documents within a non-extendable time limit of one month after notification of the present communication (R. 109 EPC).**

The claims applicable on expiry of the above time limit, i.e. those filed on entry into the European phase or in response to the present communication, will form the basis for the calculation of any claims fee to be paid (see page 2) and for any supplementary search to be carried out under Article 157(2) EPC (R. 109 EPC).

**(2) Claims fees under Rule 110 EPC**

If the application documents on which the European grant procedure is to be based comprise more than ten claims, a claims fee shall be payable for the eleventh and each subsequent claim within the period provided for in Rule 107(1) EPC.

- ☐ Based on the application documents currently on file, all necessary claims fees have already been paid (or the documents do not comprise more than 10 claims).
- ☒ All necessary fees will be/have been debited automatically according to the automatic debit order.
- ☐ The claims fees due for the claims ..... to ..... were not paid within the above-mentioned period.

Any non-paid claims fee, either based on the current set of claims or on any amended claims to be filed pursuant to Rule 109 EPC (see page 1), may still be validly paid within a non-extendable period of grace of **one month** after notification of this communication.

If a payment is made for only some of the claims, it must be indicated for which claims it is intended. If a claims fee is not paid in due time, the claim concerned is deemed to be abandoned (R. 110(4) EPC).

If claims fees have already been paid, but on expiry of the above-mentioned time limit there is a new set of claims containing fewer fee-incurring claims than previously, the claims fees in excess of those due under Rule 110(2), 2nd sentence, EPC will be refunded (R. 110(3) EPC).

You are reminded that any supplementary search under Article 157(2) EPC will relate only to the last set of claims applicable on expiry of the above time limit AND will be confined to those fee-incurring claims for which fees have been paid in due time.

**The fee for the eleventh and each subsequent claim is EUR 40,00.**

Receiving Section





P.B.5818 - Patentlaan 2  
2280 HV Rijswijk (ZH)  
☎ (070) 3 40 20 40  
FAX (070) 3 40 30 16

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European  
Patent Office

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Generaldirektion 1

Directorate General 1

Direction générale 1

Koninklijke Philips Electronics N.V.  
Groenewoudseweg 1  
5621 BA Eindhoven  
PAYS-BAS



EPO Customer Services

Tel.: +31 (0)70 340 45 00

Date

14.10.05

Reference	Application No./Patent No. 03727851.2 - 2223 PCT/IB0302334
Applicant/Proprietor Koninklijke Philips Electronics N.V.	

### Entry Into the European phase before the European Patent Office

**These notes describe the procedural steps required for entry into the European phase before the European Patent Office (EPO). You are advised to read them carefully: failure to take the necessary action in time can lead to your application being deemed withdrawn.**

1. The above-mentioned international patent application has been given European application No. **03727851.2**.
2. Applicants **without** a residence or their principal place of business in an EPC contracting state may themselves initiate European processing of their international applications, provided they do so before expiry of the 31st month from the priority date (see also point 6 below).

**During the European phase before the EPO as designated or elected Office, however, such applicants must be represented by a professional representative (Arts. 133(2) and 134(1), (7) EPC).**

Procedural acts performed after expiry of the 31st month by a professional representative who acted during the international phase but is not authorised to act before the EPO have no legal effect and therefore lead to loss of rights.

**Please note that a professional representative authorised to act before the EPO and who acted for the applicant during the International phase does not automatically become the representative for the European phase. Applicants are therefore strongly advised to appoint in good time any representative they wish to initiate the European phase for them; otherwise, the EPO has to send all communications direct to the applicant.**

3. Applicants **with** a residence or their principal place of business in an EPC contracting state are not obliged to appoint, for the European phase before the EPO as designated or elected Office, a professional representative authorised to act before the EPO.  
**However, in view of the complexity of the procedure it is recommended that they do so.**
4. Applicants and professional representatives are also strongly advised to initiate the European phase using EPO Form 1200 (available free of charge from the EPO). This however is not compulsory.





5. **To enter the European phase before the EPO, the following acts must be performed.**  
(N.B.: Failure validly to do so will entail loss of rights or other adverse legal consequences.)

5.1 If the EPO is acting as **designated or elected** Office (Arts. 22(1)(3) and 39(1) PCT respectively), applicants must, within 31 months from the date of filing or (where applicable) the earliest priority date:

- a) Supply a translation of the international application into an EPO official language, if the International Bureau did not publish the application in such a language (Art. 22(1) PCT and Rule 107(1)(a) EPC).  
**If the translation is not filed in time, the international application is deemed withdrawn before the EPO (Rule 108(1) EPC).**  
This loss of rights is deemed not to have occurred if the translation is then filed within a two-month grace period as from notification of an EPO communication, provided a surcharge is paid at the same time (Rule 108(3) EPC).
- b) Pay the national basic fee (EUR 160,00) and, where a supplementary European search report has to be drawn up, the search fee (EUR 960,00 ; Rule 107(1)(c) and (e) EPC).
- c) If the time limit under Article 79(2) EPC expires before the 31-month time limit, pay the designation fee (EUR 75,00) for each contracting state designated (Rule 107(1)(d) EPC).
- d) If the time limit under Article 94(2) EPC expires before the 31-month time limit, file the written request for examination **and** pay the examination fee (EUR 1430,00 ; Rule 107(1)(f) EPC).
- e) Pay the third-year renewal fee (EUR 380,00) if it falls due before expiry of the 31-month time limit (Rule 107(1)(g) EPC).

If the fees under (b) to (d) above are not paid in time, or the written request for examination is not filed in time, the international application is deemed withdrawn before the EPO, or the contracting-state designation(s) in question is (are) deemed withdrawn (Rule 108(1) and (2) EPC). However, the fees may still be validly paid within a two-month grace period as from notification of an EPO communication, provided the necessary surcharges are paid at the same time (Rule 108(3) EPC). For the renewal fee under (e) above, the grace period is ~~six~~ months from the fee's due date (Article 86(2) EPC).

5.2 If the application documents on which the European grant procedure is to be based comprise more than ten claims, a claims fee is payable within the 31-month time limit under Rule 107(1) EPC for the eleventh and each subsequent claim (Rule 110(1) EPC). The fee can however still be paid within a one-month grace period as from notification of an EPO communication pointing out the failure to pay (Rule 110(2) EPC).

6. If the applicant had a representative during the application's international phase, the present notes will be sent to the representative, asking him to inform the applicant accordingly.

**All subsequent communications will be sent to the applicant, or - if the EPO is informed of his appointment in time - to the applicant's European representative.**



Date

Sheet 3

Application No. 03727851.2

7. For more details about time limits and procedural acts before the EPO as designated and elected Office, see the EPO brochure

How to get a European patent  
Guide for applicants - Part 2  
PCT procedure before the EPO - "Euro-PCT"

This brochure, the list of professional representatives before the EPO, Form 1200 and details of the latest fees are now all available on the Internet under

<http://www.european-patent-office.org>

#### RECEIVING SECTION





To the European Patent Office

## Entry into the European phase (EPO as designated or elected Office)

European application number	
PCT application number	PCT/IB2003/02334
PCT publication number	
Applicant's or representative's reference	PHNL020483EP

### 1. Applicant

Particulars of the applicant(s) are contained in the international publication or were recorded by the International Bureau subsequent to the international publication. ☒

Changes which have not yet been recorded by the International Bureau are set out here: ☐

Address for correspondence

---

### 2. Representative 1

This is the representative who will be listed in the Register of European Patents and to whom notifications will be made

Name UITTENBOGAARD, Frank

Address of place of business Philips Intellectual Property & Standards  
P.O. Box 220  
NL-5600 AE Eindhoven  
Netherlands

Telephone +31 40 2743505

Fax +31 40 2743489

e-mail

Any additional representative(s) is/are listed here: ☐

---

### 3. Authorisation

An individual authorisation is attached. ☐

A general authorisation has been registered under No: ☐

A general authorisation has been filed, but not yet registered. ☐

The authorisation filed with the EPO as PCT receiving Office expressly includes the European phase. ☐

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### 4. Request for examination

Examination of the application under Art. 94 EPC is hereby requested. The examination fee is being (has been, will be) paid. ☒

Request for examination in an admissible non-EPO language: ☒

Verzocht wordt om onderzoek van de aanvraag als bedoeld in Art. 94.

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## 5. Copies

One or more additional sets of copies of the documents cited in the supplementary European search report are hereby requested.

☐

Number of additional sets of copies

---

## 6. Documents intended for proceedings before the EPO

6.1 Proceedings before the EPO as designated Office (PCT I) are to be based on the following documents:

the application documents published by the International Bureau (with all claims, description and drawings), where applicable with amended claims under Art. 19 PCT

☒

unless replaced by the amendments attached.

☐

*Where necessary, clarifications should be attached as 'Other Documents'*

6.2 Proceedings before the EPO as elected Office (PCT II) are to be based on the following documents:

the documents on which the International preliminary examination report is based, including any annexes

☒

unless replaced by the amendments attached.

☐

*Where necessary, clarifications should be attached as 'Other Documents'*

If the EPO as International Preliminary Examining Authority has been supplied with test reports, these may be used as the basis of proceedings before the EPO.

☒

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## 7. Translations

Translations in one of the official languages of the EPO (English, French, German) are attached as crossed below:

\* *In proceedings before the EPO as designated or elected Office (PCT I + II):*

Translation of the International application (description, claims, any text in the drawings) as originally filed, of the abstract as published and of any indication under Rule 13bis.3 and 13bis.4 PCT regarding biological material

☐

Translation of priority application(s)

☐

It is hereby declared that the International application as originally filed is a complete translation of the previous application (Rule 38(5) EPC)

☐

\* *In addition, in proceedings before the EPO as designated Office (PCT I):*

Translation of amended claims and any statement under Art. 19 PCT, if the claims as amended are to form the basis for the proceedings before the EPO (see Section 6).

☐

\* *In addition, in proceedings before the EPO as elected office (PCT II):*

Translation of annexes to the International preliminary examination report

☐

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## 8. Biological material

The invention relates to and/or uses biological material deposited under Rule 28 EPC. ☐

The particulars referred to in Rule 28(1)(c) EPC (if not yet known, the depository institution and the identification reference(s) [number, symbols, etc.] of the depositor) are given in the international publication or in the translation submitted under Section 7 on: ☐

page(s) / line(s)

A copy of the receipt(s) of deposit issued by the depository institution

is attached ☐

will be filed at a later date ☐

A waiver of the right to an undertaking from the requester pursuant to Rule 28(3) EPC is attached. ☐

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## 9. Nucleotide and amino acid sequences

The items required under Rules 5.2 and 13ter PCT and Rule 111(3) EPC have already been furnished to the EPO. ☐

The sequence listing as part of the description is attached in PDF format. ☐

The sequence listing does not include matter that goes beyond the content of the application as filed. ☐

In addition, the sequence listing data is attached in computer-readable form in accordance with WIPO Standard 25. ☐

The sequence listing data in computer-readable form in accordance with WIPO Standard 25 is identical to the sequence listing in PDF format. ☐

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## 10. Designation fees

10.1 It is currently intended to pay seven times the amount of the designation fee. The designation fees for all the EPC contracting states designated in the international application are thereby deemed to have been paid (Art. 2 No. 3 RFees). ☒

AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO  
SE SI SK TR

10.2 The declaration in No. 10.1 does not apply. Instead, it is currently intended to pay fewer than seven designation fees for the following EPC contracting states designated in the international application: ☐

It is requested that no communications under Rule 108(3) EPC be issued in respect of any contracting states not indicated.

10.3 If an automatic debit order has been issued (Section 12), the EPO is authorised, on expiry of the basic period under Rule 107(1)(d) EPC, to debit seven times the amount of the designation fee. If states are indicated in No. 10.2, the EPO will debit designation fees for those states only, unless instructed otherwise before the basic period expires. ☒

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**11. Extension of the European patent**

This application is also considered as being a request for extension to all the non-contracting states to the EPC designated in the international application with which "extension agreements" were in force on the date of filing the international application. However, the extension only takes effect if the prescribed extension fee is paid.



It is currently intended to pay the extension fee for the following states:

---

**12. Automatic debit order**

Currency

EUR

The EPO is hereby authorised, under the Arrangements for the automatic debiting procedure, to debit from the deposit account below any fees and costs falling due. For designation fees, see "States". The EPO is also authorised, on expiry of the basic period for paying the extension fees, to debit those fees for each of the "extension states" indicated in "States",

Deposit account number

28090021

Account holder

Philips International B.V. - IP&S

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**13. Reimbursements (if any) should be made to the following EPO deposit account:**

Number and account holder

28090021, Philips International B.V. - IP&S

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**14. Fees**

		Factor applied	Fee schedule	Amount to be paid
14-1	002 Search fee	0	690.00	0.00
14-2	015 Claims fee	1	40.00	40.00
14-3	020 Basic national fee for an international application	1	90.00	90.00
14-4	033 Renewal fee for the 3rd year	1	380.00	380.00
Total:			EUR	510.00

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**15. Annotations**

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**16. Signature(s) of applicant(s) or representative**

Place: Eindhoven  
Date: 12 October 2005  
Signed by: Subject: NL, Philips IP&S, J. van der Veer 1086  
Issuer: , European Patent Office, European Patent Office CA  
Capacity: ( Representative )

For employees (Art. 133(3) EPC) having a general authorisation:  
General authorisation No.

---





Europäisches  
Patentamt

European  
Patent Office

Office européen  
des brevets

### Acknowledgement of receipt

We hereby acknowledge receipt of the form for entry into the European phase (EPO as designated or elected Office) as follows:

Submission number	73056	
PCT application number	PCT/IB03/02334	
Date of receipt	12 October 2005	
Your reference	PHNL020483EP	
Applicant		
Country		
Documents submitted	EPF1200.PDF ep-euro-pct.xml	application-body.xml package-data.xml
Submitted by	CN=J. van der Veer 1086,O=Philips IP&S,C=NL	
Method of submission	Online	
Date and time receipt generated	12 October 2005, 12:49:25	
Digest	07:DC:55:C0:B8:84:33:53:BE:C0:BE:37:E9:5C:02:30:B7:08:84:02	

/European Patent Office/

## INTERNATIONAL SEARCH REPORT

Internati      plication No  
PCT/IB 03/02334A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7      G11B27/19

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7      G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 275 466 B1 (KATAYAMA TSUYOSHI ET AL)	11
A	14 August 2001 (2001-08-14)	
	column 20, line 65 -column 22, line 12;	1,5-9
	figure 20	
	---	
A	VLERKEN VAN J J L M ET AL: "Format detection for DVD+ReWritable 4.7 GB" INTERNATIONAL CONFERENCE ON CONSUMER ELECTRONICS. 2000 DIGEST OF TECHNICAL PAPERS. ICCE. JUNE 13-15, 2000, NEW YORK, NY: IEEE, US, 13 June 2000 (2000-06-13), pages 162-163, XP002197293 ISBN: 0-7803-6302-7 the whole document	1,2,5-9
	---	
	-/--	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

19 December 2003

Date of mailing of the international search report

30/12/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Brunet, L

## INTERNATIONAL SEARCH REPORT

Internat<sup>l</sup>      plication No  
PCT/IB 03/02334

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 345 018 B1 (SHIGEMORI TOSHIHIRO ET AL) 5 February 2002 (2002-02-05) column 15, line 41 -column 16, line 21; figures 16-19 -----	1,5-9
A	WO 00 43996 A (KONINKL PHILIPS ELECTRONICS NV) 27 July 2000 (2000-07-27) page 4, line 8 -page 6, line 29; figures 2,4 -----	1,2,5-9
A	US 4 901 300 A (HOEVEN PETRUS C J ET AL) 13 February 1990 (1990-02-13) cited in the application column 12, line 37 -column 13, line 27; figure 6 -----	1,5-9
A	US 5 187 699 A (ROTH RUDOLF ET AL) 16 February 1993 (1993-02-16) cited in the application -----	
P,A	EP 1 271 489 A (MATSUSHITA ELECTRIC IND CO LTD) 2 January 2003 (2003-01-02) paragraph '0193! - paragraph '0195!; figure 23 -----	1,5-9
P,A	US 2003/012123 A1 (KUROKAWA TAKAHIRO ET AL) 16 January 2003 (2003-01-16) paragraph '0072! - paragraph '0080!; figures 12A,12B -----	1,5-9,11

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Information on patent family members

Internat

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# INTERNATIONAL SEARCH REPORT

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International Application No

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